

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-21 (Canceled)

Claim 22 (Previously Presented): A product comprising:

a regeneration particulate trap comprising a catalyzed foam filter and wall flow filter combination, wherein the wall flow filter has at least one through hole cell formed therein running the longitudinal length of the wall flow filter and wherein at least a portion of the wall flow filter circumferentially surrounds a portion of the catalyzed foam filter and wherein the catalyzed foam filter and wall flow filter are constructed and arranged so that exhaust first flows through the catalyzed foam filter and then flows through the wall flow filter and wherein the catalyzed foam filter includes a side edge and a rear face and wherein the wall flow filter circumferentially surrounds at least a portion of the side edge to trap particulate matter between the wall flow filter and the catalyzed foam filter, wherein a first space is located between the side edge and the rear face of the catalyzed foam filter and an inner surface of the wall flow filter, wherein a second space is located between an outer surface of the wall flow filter and an inner surface of an exhaust conduit which circumferentially surrounds the wall flow filter, wherein exhaust flows in a radial direction through the catalyzed foam filter, through the first space, through the wall flow filter, and then to the second space, and wherein exhaust flows in an axial direction through the catalyzed foam filter, through the first space, and then through the wall flow filter, and wherein the catalyzed foam filter comprises a catalyst constructed and arranged to convert NO in engine combustion exhaust flowing through the product to NO₂ and so that additional NO₂ is in the exhaust stream an amount sufficient to oxidize carbon particulates trapped by the catalyzed foam filter and wall filter combination.

Claim 23 (Previously Presented): A product as set forth in claim 22 wherein the exhaust conduit has a cavity defined by the inner surface and wherein the combination is received in the cavity.

Claim 24 (Previously Presented): A product as set forth in claim 23 wherein the catalyzed foam filter includes a front face, and further comprising a separator connected to the inner surface and the separator having an opening therethrough, and wherein the combination is supported by the separator so that the opening exposes the front face of the catalyzed foam filter.

Claim 25 (Canceled)

Claim 26 (Previously Presented): A product as set forth in claim 22 wherein the wall flow filter surrounds the rear face of the catalyzed foam filter.

Claim 27 (Previously Presented): A product as set forth in claim 22 wherein the wall flow filter is a single cell wall flow filter.

Claim 28 (Canceled)

Claim 29 (Previously Presented): A product as set forth in claim 22 wherein the wall flow filter comprises a porous wall, a portion of which is spaced a distance from the rear face of the catalyzed foam filter.

Claim 30 (Previously Presented): A product comprising:
a regeneration particulate trap comprising a plurality of filter combinations, and wherein each filter combination includes a catalyzed foam filter and wall flow filter, wherein each wall flow filter has at least one through hole cell formed therein running the longitudinal length of the wall flow filter and wherein at least a portion of each wall flow filter circumferentially surrounds a portion of a catalyzed foam filter and wherein each filter combination is constructed and

arranged so the exhaust first flows through the catalyzed foam filter and then flows through the wall flow filter and wherein each catalyzed foam filter includes a side edge and wherein one of the wall flow filters circumferentially surrounds at least a portion of the side edge to trap particulate matter between the wall flow filter and the catalyzed foam filter, wherein a first space is located between the side edge of the catalyzed foam filter and an inner surface of the wall flow filter, wherein a second space is located between an outer surface of the wall flow filter and an inner surface of an exhaust conduit which circumferentially surrounds the wall flow filter, and wherein exhaust flows in a radial direction through the catalyzed foam filter, through the first space, through the wall flow filter, and then to the second space, and wherein the catalyzed foam filter comprises a catalyst constructed and arranged to convert NO in engine combustion exhaust flowing through the product to NO₂ and so that additional NO₂ is in the exhaust stream an amount sufficient to oxidize carbon particulates trapped by the catalyzed foam filter and wall filter combination.

Claim 31 (Previously Presented): A product as set forth in claim 30 wherein the exhaust conduit has a cavity defined by the inner surface and wherein each combination is received in the cavity.

Claim 32 (Previously Presented): A product as set forth in claim 31 wherein each catalyzed foam filter includes a front face, and further comprising a separator connected to the inner surface and the separator having a plurality of openings therethrough, and wherein each opening is constructed and arranged to expose the front face of one of the catalyzed foam filters.

Claim 33 (Canceled)

Claim 34 (Previously Presented): A product as set forth in claim 30 wherein each catalyzed foam filter further includes a rear face and wherein the wall flow filter surrounds the rear face of the catalyzed foam filter.

Claim 35 (Previously Presented): A product as set forth in claim 22 further comprising engine exhaust gas flowing through the catalyzed foam filter and wall flow filter.

Claim 36 (Previously Presented): A product as set forth in claim 22 further comprising a diesel engine, and an exhaust line connected to the diesel engine to flow combustion exhaust gases through the catalyzed foam filter and wall flow filter.

Claim 37 (Previously Presented): A product as set forth in claim 22 further comprising an engine and an exhaust line connected to the engine, the exhaust line being connected to a housing, and wherein the catalyzed foam filter and wall flow filter are received in the housing, and wherein the catalyzed foam filter includes a front face, and further comprising a separator connected to the inner surface of the housing, and the separator having an opening therethrough, and wherein the combination is supported by the separator so that the opening exposes only the front face of the catalyzed foam filter.

Claim 38 (Previously Presented): A product as set forth in claim 30 further comprising engine exhaust gas flowing through the plurality of filter combinations.

Claim 39 (Previously Presented): A product as set forth in claim 30 further comprising a combustion engine and an exhaust line connected to the combustion engine and constructed and arranged to flow engine exhaust gas through the plurality of filter combinations.

Claim 40 (Previously Presented): A product comprising:
a regeneration particulate trap comprising an engine exhaust filter system comprising a catalyzed foam filter and wall flow filter, wherein the wall flow filter has at least one through hole cell formed therein running the longitudinal length of the wall flow filter and wherein the catalyzed foam filter includes a side edge and a rear face and wherein the wall flow filter circumferentially surrounds at least a portion of the side edge, and so that a first space is provided between the wall flow filter and the side edge sufficient to trap particulate matter in the

first space, and wherein the combination is constructed and arranged so that the exhaust first flows through the catalyzed foam filter and then flows through the wall flow filter, and wherein a second space is located between an outer surface of the wall flow filter and an inner surface of an exhaust conduit which circumferentially surrounds the wall flow filter, wherein exhaust flows in a radial direction through the catalyzed foam filter, through the first space, through the wall flow filter, and then to the second space, and wherein the catalyzed foam filter comprises a catalyst constructed and arranged to convert NO in engine combustion exhaust flowing through the product to NO₂ and so that additional NO₂ is in the exhaust stream an amount sufficient to oxidize carbon particulates trapped by the catalyzed foam filter and wall filter combination.

Claim 41 (Previously Presented): A product as set forth in claim 40 wherein the exhaust conduit has a cavity defined by the inner surface and wherein the combination is received in the cavity, and wherein the catalyzed foam filter includes a front face, and further comprising a separator connected to the inner surface and the separator having an opening therethrough, and wherein the combination is supported by the separator so that the opening exposes only the front face of the catalyzed foam filter.

Claim 42 (Previously Presented): A product as set forth in claim 41 further comprising an engine, and an exhaust line connected to the engine, and the exhaust line being connected to the conduit and constructed and arranged to flow engine exhaust gas through the opening in the separator.

Claim 43 (Previously Presented): A product comprising:
a diesel engine exhaust filter system comprising a plurality of filter combinations, and wherein each filter combination comprises a regeneration particulate trap comprising a catalyzed foam filter and a wall flow filter, wherein each wall flow filter has at least one through hole cell formed therein running the longitudinal length of the wall flow filter and wherein the catalyzed foam filter and wall flow filter are constructed and arranged so diesel engine exhaust gas first flows through the catalyzed foam filter and then flows through the wall flow filter and wherein

each catalyzed foam filter includes a side edge and wherein one of the wall flow filters circumferentially surrounds at least a portion of the side edge, and so that a first space is provided between the one of the wall flow filters and the side edge sufficient to trap particulate matter therein, further comprising a housing having an inner surface, and wherein each catalyzed foam filter includes a front face, and further comprising a separator connected to the inner surface and the separator having a plurality of openings therethrough, wherein each opening is constructed and arranged to expose only the front face of one of the catalyzed foam filters, wherein a second space is located between an outer surface of the wall flow filter and the inner surface of the housing, and wherein exhaust gas flows in a radial direction through the catalyzed foam filter, through the first space, through the wall flow filter, and then to the second space, and wherein the catalyzed foam filter comprises a catalyst constructed and arranged to convert NO in engine combustion exhaust flowing through the product to NO₂ and so that additional NO₂ is in the exhaust stream an amount sufficient to oxidize carbon particulates trapped by the catalyzed foam filter and wall filter combination.

Claim 44 (Previously Presented): A product as set forth in claim 43 further comprising an engine, and an exhaust line connected to the engine and to the housing and constructed and arranged to flow diesel engine exhaust gas through each opening in the separator.

Claim 45 (Previously Presented): A product as set forth in claim 22 wherein the catalyzed foam filter comprises a ceramic foam.

Claim 46 (Previously Presented): A product as set forth in claim 30 wherein the catalyzed foam filter comprises a ceramic foam.

Claim 47 (Previously Presented): A product as set forth in claim 22 wherein the catalyst foam filter comprises platinum.